

## Connector - PV-CM-S 6-16 (-) - 1790797


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Photovoltaic connector, Range of articles: PV-CM-S, Connector, housing material: PPE, color: black, number of positions: 0, min. conductor cross section: 6 mm², max. conductor cross section: 16 mm², rated current: 40 A, Connection method: Spring-cage, Type of contact: Pin

RoHS

### Key Commercial Data

Packing unit	25 pc
GTIN	
GTIN	4046356607438

### Technical data

#### Dimensions

External cable diameter	5.5 mm ... 10 mm
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#### Ambient conditions

Degree of protection (when plugged in)	IP66 / IP68 (2 m / 24 h)
Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (assembly)	-25 °C ... 50 °C

#### General

Design	Pin
Tightening torque nut	3 Nm ±0.1 Nm
Insertion force	45 N ±10 N
Disconnect force	250 N ±50 N (when locked)
Pull-out force of cable >= disconnect force	> 500 N
Insertion/withdrawal cycles	100
Degree of pollution	3
Degree of protection	IP66 / IP68 (2 m / 24 h)
Number of positions	0
Current	65 A
Rated voltage	1500 V

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## Technical data

### General

Rated current (6.0 mm <sup>2</sup> )	40 A
Rated current (10 mm <sup>2</sup> )	50 A
Rated current (16 mm <sup>2</sup> )	65 A
Nominal cross section	16 mm <sup>2</sup>
Protection class	II

### Material

Color	black
Insulating material	mPPE
Contact material	Cu
Contact surface material	Ag
Flammability rating according to UL 94	V0

### Connection data

Connection method	Spring-cage
Connection capacity	6 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Contact resistance with connected conductor	0.45 mΩ
Stripping length	18 mm
Cable type	PV1-F cables

### Standards and Regulations

Halogen-free	yes
Flammability rating according to UL 94	V0
Safety note	<ul style="list-style-type: none"> <li>• WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.</li> </ul>
	<ul style="list-style-type: none"> <li>• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.</li> </ul>
	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	<ul style="list-style-type: none"> <li>• The products are suitable for applications in plant, controller, and electrical device engineering.</li> </ul>
	<ul style="list-style-type: none"> <li>• Assembled products may not be manipulated or improperly opened.</li> </ul>
	<ul style="list-style-type: none"> <li>• Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a>).</li> </ul>
	<ul style="list-style-type: none"> <li>• When using the product in direct connection with third-party manufacturers, the user is responsible.</li> </ul>
	<ul style="list-style-type: none"> <li>• For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>
	<ul style="list-style-type: none"> <li>• Ensure that the protective or functional ground has been properly connected.</li> </ul>

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### Technical data

#### Standards and Regulations

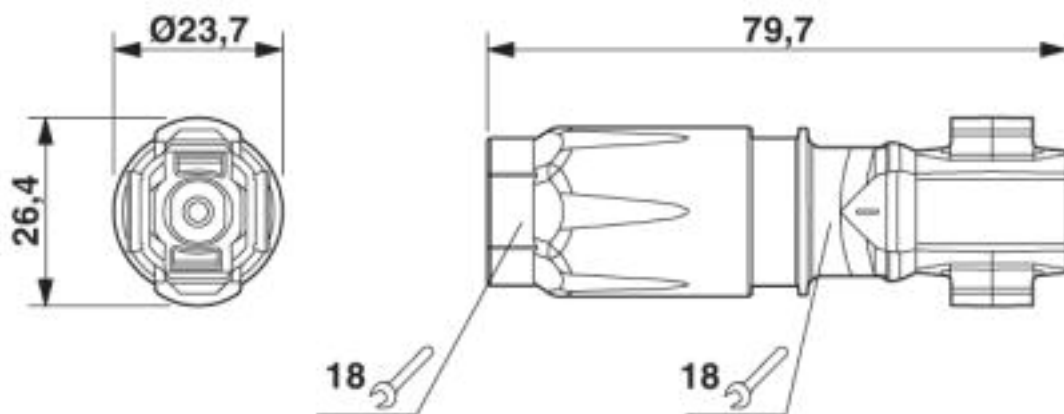
	<ul style="list-style-type: none"> <li>• Observe the corresponding technical data. You will find information: <ul style="list-style-type: none"> <li>o On the product</li> <li>o On the packing label</li> <li>o In the supplied documentation</li> <li>o Online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> under the product</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• The installation notes/Design In documents online on the download page at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> must be observed for this product.</li> </ul>
	<ul style="list-style-type: none"> <li>• Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a></li> </ul>
	<ul style="list-style-type: none"> <li>• The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).</li> </ul>
	<ul style="list-style-type: none"> <li>• Operate the connector only when it is fully plugged in and interlocked.</li> </ul>
	<ul style="list-style-type: none"> <li>• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> </ul>
	<ul style="list-style-type: none"> <li>• Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li> </ul>

#### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

### Drawings

Dimensional drawing



### Classifications

eCl@ss

eCl@ss 10.0.1	27440109
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700

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### Classifications

#### eCl@ss

eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440102
eCl@ss 8.0	27440102
eCl@ss 9.0	27440103

#### ETIM

ETIM 4.0	EC002637
ETIM 5.0	EC002635
ETIM 6.0	EC002061

#### UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121413
UNSPSC 18.0	39121413
UNSPSC 19.0	39121413
UNSPSC 20.0	39121413
UNSPSC 21.0	39121413

### Approvals


#### Approvals

Approvals

TÜV Rheinland / EAC

Ex Approvals

#### Approval details

TÜV Rheinland		<a href="http://www.certipedia.com">http://www.certipedia.com</a>	R 60126961
Nominal voltage UN	1500 V		

## Connector - PV-CM-S 6-16 (-) - 1790797

### Approvals

EAC



B.01687

### Accessories

#### Accessories

##### Photovoltaic connector

##### Protective cap - PV-C PROTECTION CAP - 1785430



Photovoltaic connector, Range of articles: SUNCLIX, Protective cap, color: black. self-sealing, without interlock, set consisting of: 1 protective cap for connector side and 1 protective cap for coupling side

##### Filler plugs - PV-C-PLUG-HV - 1623478



Photovoltaic connector, Filler plugs, housing material: PA 6

### Screwdriver tools

##### Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

### Stripping tool

##### Stripping pliers - QUICK WIREFOX 6 SC - 1207637



Stripping tool for short-circuit proof conductors, stripping range: 1.5 up to 6 mm<sup>2</sup>, wire cutting up to 6 mm<sup>2</sup> cable stopper up to 18 mm<sup>2</sup>

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